

Report Form for Water Conservation Plans Small Community Water Systems January 2006*

PROJECT NAME: Galilee Pond Estates II CWS

Well No. 1 and Well No. 2

TOWN/CITY:

Kingston, New Hampshire

DATE:

December 2005

EPA ID#

NEW SYSTEM

PURPOSE: This form will provide the information needed for small community water systems to meet the reporting requirements of Env-Ws 390, Water Conservation Rules. Once completed, this form can fulfill the requirements of Env-Ws 390.10. You don't have to use this form. However, based on experience, the Department has found that use of a form speeds the application process. If you prefer to produce an original report, remember to provide all the information required under the rules and the Department recommends that you use this form as a checklist to help ensure your report is complete. Helpful information and reminders are provided throughout the form and are printed in italics. Copies of this form, the rules, a summary of the rules, educational materials for public distribution, and other useful publications may be found at the following website: http://www.des.nh.gov/h2o conservation.htm.

INSTRUCTIONS:

- A. Obtain copies of the following materials from either the Department's Public Information Center (603) 271-2975 or by direct download from the above website.
 - Administrative Rule, Env-Ws 390, Water Conservation Rules.
 - The fact sheet, Summary of the Water Conservation Rule.
 - Any pertinent water efficiency fact sheet.
 - Extra copies of this form.

- B. Review the water conservation rules and guidance materials obtained above. You should use these materials to prepare your water conservation plan. It is suggested that you submit a draft plan for review prior to meeting your public notification requirements in case substantive changes to the plan are necessary. Resubmittal of the report to the public entities can be avoided if initial review is performed by the Department.
- C. Complete the form by answering all questions and providing the appropriate attachments. Answer the questions from top to bottom, unless instructed to skip to another section. Helpful information and reminders are provided throughout the form and are printed in *italics*.
- D. Before submitting, review the form to ensure all questions are answered and all attachments are included. When complete submit to:

Water Conservation Plans Small Community Well Siting Program Water Supply Engineering Bureau 29 Hazen Drive, Post Office Box 95 Concord, NH 03302 -0095

For help with this form or other water conservation planning concerns call Diana Morgan at (603) 271-2947.

^{*}Information contained in this form is current as of October 2005. Statutory or regulatory changes that may occur after October 2005 may cause part or all of the information to be invalid. If there are any questions concerning the status of the information please contact DES at (603) 271-2947.

Section 1.0 GENERAL INFORMATION

WEL	\mathbf{L}	SIT	IN	G:

Has a Preliminary Well Siting report been submitted to the Department? (If your answer is **NO**, please contact the Department at 603-271-2947 before you proceed further.)
YES X NO

(The section below asks you to identify the people and companies responsible for the water conservation plan application. This information will help ensure clear communication during the application process.)

1.1 Project Contacts / System Ownership

1.1a Project Contac	t: (Person com	oleting this form?)

Name:

Neil W. Helberg

Address:

44 Stark Lane, Litchfield, NH 03052

Company:

Lewis Engineering, PLLC

Phone Number:

603-886-4985

1.1b Project Owner: (Who is responsible for compliance with the water conservation plan, as approved by the Department?)

Name:

Ms. Gerda Kalman

Address:

50 Main Street, Kingston, NH 03848

Company:

c/o Sumner Kalman, Esq.

Phone Number:

P.O. Box 998, Plaistow, NH 03865 603-382-4003 FAX: 603-

1.1c Person responsible for completing the activities outlined in this plan: (Please note that the person completing water conservation plan activities must be a certified water system operator or water system personnel supervised by the certified operator.)

Name:

New Hampshire Certified Operator

Company:

(Water Company, Service Company or Individual)

Address:

To be determined

Phone Number:

1.1d Will ownership of the water system be transferred at a future date from the person listed in 1.1b to a Homeowner's Association or other entity?

YES_X_NO__

If YES, indicate below the contact information for the new owner of the water system.

Name:

Homeowner's Association or Water Company

Address:

To be determined

Company:

Phone Number:

Section 2.0 Metering & Leak Detection

(This information is needed to help ensure the water conservation plan will meet the intended purpose and that the plan is designed appropriately.)

2.1 Water System (All systems must complete Sections 3.0-6.0)

Is this a new water system? YES_X __NO__ (If YES, go to Sections 2.2, 2.3d and 2.3e)

Is this a new source for an existing water system? YES___ NO___ (If YES, go to Section 2.3)

2.2 Metering of New Small Community Water Systems

(Meters must be installed on all sources of water and at each service connection on new small community water systems.)

2.2a Describe below the size of both the source and service connection meters to be utilized by the water system. (In selecting, installing, and maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association.)

PUMP HOUSE METERS

- WELL METERS......2 EACH......1-INCH NEPTUNE
- STATION DISCHARGE.....1 EACH.... 3-INCH NEPTUNE

HOUSEHOLD METERS

- 5/8 INCH POSITIVE DISPLACEMENT
- 2.2b Describe below the frequency in which each type of meter will be read. (Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)

Source meters at the pump house will read at least twice a month, and house service meters will be read every thirty (30) days. Source meters will be read on the same day as the house service meters are read.

2.3 Metering of Existing Small Community Water Systems

(If no further expansion of an existing small community water system is planned the water system may either install meters on all service connections within 3 years of approval of the plan and estimate unaccounted-for water[see section 2.3d], or the system may opt to conduct a comprehensive leak detection survey every 2 years and repair all leaks identified by the survey [See section 2.3e]. If further expansion of the system is proposed, meters must be installed on all new services, regardless of whether the system opts to conduct a leak detection audit rather than metering. Meters are also required on all sources of water for existing small community water systems.)

2.3a Is your system choosing to install meters on your existing system to track
unaccounted-for water or is your system adding new service connections to you
existing system?

YES	*	NO	

- If YES, your system must estimate unaccounted-for water annually, go to sections 2.3b, 2.3c and 2.3d. If you answered NO, your system must perform a leak detection survey every 2 years, go to section 2.3e.
- 2.3b Describe below the size of both the source and service connection meters to be utilized by the water system. (In selecting, installing, and maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association.)
- 2.3c Describe below the frequency in which each type of meter will be read. (Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)

2.3d Estimating Unaccounted-For Water

Describe below how the water system will estimate the volume and percentage of unaccounted-for water. Also note how often the water system proposes estimating unaccounted-for water. (All new small community water systems and all existing small community water systems opting for metering and water accounting, or existing small community systems that are adding new connections, must meet this requirement. Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15%, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the Department within 60 days.)

The certified operator will calculate the percentage of unaccounted- for-water percentage twice a year. Unaccounted- for- water is the difference between the total water pumped from the pump station, and the customer metered usage. One calculation will be during a winter month and the other during the month of June, July or August. If the percentage of unaccounted- for-water vs. pumped water exceeds 15%; a leak detection survey will be completed by the certified operator or another qualified water professional.

2.3e Water Audit and Leak Detection Program

Describe below who will be responsible for conducting a leak detection survey, the frequency of the surveys and a brief text description of how those surveys will be conducted. (Surveys for existing systems that are opting out of metering service connections shall be performed at least every two years. Leaks identified by the survey must be repaired within at least 60 days unless a waiver is obtained from the Department. The requirements of this section of the rule must follow the standards

set forth in AWWA M36, "Manual of Water Supply Practices, Water Audits and Leak Detection", available from the American Water Works Association.)

Water Audits and leak detection surveys will be completed by the water system's certified operator or another qualified water professional if the percentage of unaccounted for water exceeds 15%. Any leaks found by the survey will be repaired in less than 60 days unless a waiver is obtained from the NHWSEB.

Section 3.0 Pressure Reduction

(Pressure reduction shall be implemented upon obtaining approval of a new source of water when it is technically feasible, consistent with industry standards, and consistent with public health and safety considerations. Existing small community water systems have one year after approval of the conservation plan to implement this requirement, if feasible. All pressure reduction measures must meet the requirements of Env-Ws 372, Design Standards for Small Community Public Water Systems.)

Is pressure reduction possible for this system? If **YES**, explain below how it will be accomplished for the system. If **NO**, explain why below.

Pressure leaving the pump house will likely be in the 70 to 90+/- psi. The pressure at the highest home will be 40 psi or greater. The lowest unit with the highest pressure will likely be the pump house

Section 4.0 Conservation Rate Structure

(Unless a small community water system is owned by a landlord who supplies water only to tenants and includes water service in a rental fee, all new small community water systems must adopt a rate structure, and existing systems that either add new service connections or choose to meter existing service connections as part of leak monitoring must adopt a rate structure, as described in Env-Ws 390.04 & .05.)

4.1 Is this system owned by a landlord who supplies water only to tenants and includes water service in a rental fee? If **YES**, go to section 5.0; if **NO**, go to section 4.2.

4.2 Describe below the conservation rate structure the water system proposes adopting, **or** if not practical or feasible for the system, describe below how the water system will manage water service fees to meet the intent of the rule and promote water conservation. (You will need to fill out a waiver application form found at the end of this document.)

MONTHLY GENERAL METERED RATE

Service Area: Galilee Pond Estates - Kingston service area.

METER	RATE		
5/8	\$ 20.00		
3/4"	\$ 25.00		
1"	\$ 35.00		

In addition to the standard customer charge, the monthly volumetric charge is:

\$3.50 per 100 Cubic Feet (0 to 4,000 Cubic Feet) \$5.00 per 100 Cubic Feet (In excess of 4,000 Cubic Feet)

100 Cubic Feet = 748 gallons 4,000 Cubic Feet Over a Thirty(30) day period equals 997 Gallons per Day.

Section 5.0 Public Notification

(Within 7 days of submitting the final water conservation plan for review by the Department a small community water system must provide a copy of this report via certified mail to the governing board of the municipality in which a proposed source is located, to all wholesale customers [if any], and to the regional planning commission for the location of the proposed source. The water system shall supply the governing boards with a copy of a summary of the requirements of Env-Ws 390. This document can be found on the website noted at the beginning of this form. You must also note in your correspondence to the above-mentioned governing boards that a copy of the Well Siting Application is available for their review at the Department and provide them with Department contact information. The water system shall request that the governing boards amend any site plan submitted to them for review so that it reflects the requirements of Env-Ws 390 and promotes water conservation landscaping principals.)

List the names and addresses of the governing boards receiving public notification. Attach a copy of the cover letter sent to the governing boards and a copy of the certified mail receipts when available. List the educational/outreach materials that the system is providing to the municipalities for review.

Board of Selectmen	Cliff Sinnott
Town of Kingston	Executive Director
P.O. Box 716	Rockingham Planning Commission
Kingston, NH 03848	156 Water Street
	Exeter, NH 03833
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Section 6.0 Educational Outreach Initiative

(Such an initiative may be achieved in many ways, but must be implemented immediately upon approval of the conservation plan and should include the pertinent water efficiency fact sheets that can be found at the website listed at the beginning of this report. These educational mailings can be included with wellhead protection program educational mailings as required by Env-Ws 378.18 or with the water system service bills. Other acceptable outreach initiatives include water system or homeowner's association newsletters, posting of water conservation fact sheets in public areas used by water system customers, or any other initiative that meets the intent of the rules.)

Provide a brief description of your educational outreach initiative. Include implementation procedures, the person responsible for the initiative, the content of educational mailings proposed (if any), and the wording of any newsletter insertions or public postings. (There is no need to provide copies of educational outreach materials that you are acquiring from the Department website. Only provide copies of educational outreach materials generated by the water system.)

Educational Outreach fact sheets will be distributed yearly with the Consumer Confidence Report. Educational outreach materials will be obtained from the NHDES WSEB.

Before submitting, thoroughly check this form to be sure all applicable questions are answered, all information is provided, and all necessary attachments are included. Incomplete submittals will significantly slow the approval process.

If strict compliance with any of the requirements of Env-Ws 390 is not feasible, the small community water system may apply for a waiver to a specific portion of the rule. A waiver application form is provided at the end of this document for your convenience.

Preparer's Signature:

Date:

As a reminder, have you included the following?

- Educational outreach initiative documentation and materials created by the water system.
- Public notification documentation (certified mail receipts).
- Public notification cover letters and pertinent documents.
- Other pertinent or supportive materials.

Water Conservation Requirements for New Small Community Water Systems (Env-Ws 390, Water Conservation)

A new small community water system seeking approval for a source of drinking water must meet the requirements of New Hampshire Administrative Rule Env-Ws 390, *Water Conservation*. Those requirements are outlined below.

<u>Application</u> (Env-Ws 390.10). A proposed small community water system shall submit a report with the Preliminary Well Siting Report that demonstrates compliance with Env-Ws 390.04, 10, & 11. The report should address the following issues:

- Metering. Include a timetable for installing water meters on all service connections except that used for firefighting and all water sources (wells). This section should also document the proper sizing of the above water meters in accordance with the specifications of the manufacturer. Selection, installation, and maintenance of water meters must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance," document identification number AWWA M6, American Water Works Association, 1999. The report must reflect the recommendations of this manual.
- Maintenance Plan. The plan shall include a schedule for reading meters. All meters on individual service connections must be read at least once every 90 days. All source meters must be read at least once every 30 days. The selection, installation, and maintenance of water meters shall be completed by-water system personnel under the supervision of a certified water system operator.
- ➤ Water Audit and Leak Detection Program. Propose a Water Audit and Leak Detection Program, including an implementation schedule and responsible person, that meets the guidelines in the "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999. The Program should also include a schedule to repair all leaks identified during the water audit and leak detection survey. Env-Ws 390 requires that all leaks be repaired within 60 days of discovery unless a waiver is obtained. The Program must include a process for estimating the volume and percentage of unaccounted-for water using protocols and procedures described in AWWA M36. These estimates must be made yearly. **
- ➤ Unaccounted for Water Response Plan and Schedule. In the event that the percentage of unaccounted for water identified during the Water Audit and Leak Detection survey exceeds 15% of the total water introduced to the water system, the water system operator must prepare and submit a Response Plan to the department within 60 days of discovery Propose a process, timetable, and the person responsible for preparing and submitting a Response Plan. The Response Plan shall identify how the water system intends to reduce the percentage of unaccounted for water to below 15% within 2 years, except for the

leaks that must be repaired within 60 days of discovery. Once the responsible party has prepared the Response Plan the department shall approve it within 90 days if it contains recommended actions that comply with the requirements specified in Env-Ws 390. The water system must implement the Response Plan upon receiving approval from the department. **

- ➤ Pressure Reduction. If applicable, the preliminary report shall include a schedule to implement pressure reduction when it is technically feasible, consistent with water system industry standards and regulations; and consistent with other public health and safety considerations. Include a proposal for pressure reduction if the above standards can be met.
- > Conservation Rate Structure. If applicable, the preliminary report shall include a rate structure that promotes water conservation. The rate structure shall be based on a unit price of water; and the amount of water used by each connection to the water system. The unit price of water for residential connections shall remain the same or increase with the volume of water consumed. **
- ➤ Water Conservation Education Outreach Initiative. Propose a water conservation educational outreach initiative using materials prepared by the department. For small systems this initiative will include educational mailings and resemble a Source Water Protection Program for new well sitings. Implementation shall include the applicable public notification and outreach requirements to municipal governments within its service area as stated in Env-Ws 390.11, and promoting water conservation to customers immediately upon obtaining approval for the new source.**

**These activities outlined in the preliminary report shall be completed by water system personnel under the supervision of a certified water system operator.

Public Notification (Env-Ws 390.11). Within 7 days of submitting the report the applicant shall provide a copy of the application and report via certified mail to the governing board of the municipality in which a proposed source is located, all municipalities that will receive water from the water system (if any), all wholesale customers of the water system (if any), and the regional planning commission serving the location of the proposed source. In most cases, for small water systems, only the municipality and the regional planning commission will require notification. The notified entities may provide the department with written comments regarding the application within 21 day of receipt. The applicant must provide the governing boards with a summary of the requirements of Env-Ws 390. The applicant must request that the governing board amend the local site planning requirements to reflect the requirements of Env-Ws 390 or to promote water efficiency.

<u>Site Visit</u> (Env-Ws 390.12). The department shall conduct a site visit within 30 days of receipt of the report. The purpose of the site visit is to review the report with the water user and assess the accuracy of the processes described in the report.

The department shall either approve or deny the application within 45 days of receipt of the report.

On-Going Compliance with Water Conservation Rules (Env-Ws 390.13). The water system shall submit a form every 3 years documenting how compliance with the requirements of Env-Ws 390.04 in being achieved. This form will be supplied by the department.